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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,660	01/26/2004	01/26/2004 Soon-hac Hong		8800
	7590 02/04/200 DDLE & REATH LLP	EXAMINER		
ATTN: PATEN	IT DOCKET DEPT.	WIENER, ERIC A		
CHICAGO, IL	ER DRIVE, SUITE 370 60606	00	ART UNIT	PAPER NUMBER
			2179	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary		Application No. Applicant(s)							
			10/764,660		HONG, SOON-HAC				
		Ī	Examiner		Art Unit				
			Eric Wiener		2179				
<i>T</i> Period for R	he MAILING DATE of this commun eply	ication appea	ars on the c	over sheet with the c	orrespondence ad	ddress			
WHICHE - Extension after SIX - If NO peri - Failure to Any reply	TENED STATUTORY PERIOD F VER IS LONGER, FROM THE M s of time may be available under the provisions 6) MONTHS from the mailing date of this com of for reply is specified above, the maximum st reply within the set or extended period for reply received by the Office later than three months a tent term adjustment. See 37 CFR 1.704(b).	AILING DAT of 37 CFR 1.136( nunication. atutory period will will, by statute, ca	(a). In no event, apply and will example and the applications.	COMMUNICATION however, may a reply be tim  xpire SIX (6) MONTHS from tion to become ABANDONEI	N. nely filed the mailing date of this of (35 U.S.C. § 133).				
Status									
1)⊠ Re	sponsive to communication(s) file	ed on 10 Dec	ember 200	8					
·		2b)⊠ This a							
′ <del>=</del>		<i>7</i> —			secution as to the	e merits is			
,—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Disposition	·								
•		ending in the	e annlicatio	n					
	Claim(s) <u>1-4,6-21,24 and 25</u> is/are pending in the application.								
	4a) Of the above claim(s) is/are withdrawn from consideration.								
•—	5)  Claim(s) is/are allowed. 6)  Claim(s) <u>1–4,6–21,24, and 25</u> is/are rejected.								
		rejected.							
•	nim(s) is/are objected to.	otion and/ar a	alaatian raas	uiromont					
0) <u> </u> Cla	nim(s) are subject to restric	non and/or e	election requ	allement.					
Application	Papers								
9)☐ The specification is objected to by the Examiner.									
10) <u></u> Th∈	drawing(s) filed on is/are:	a)∏ accep	oted or b)□	objected to by the E	Examiner.				
Ap	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).									
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.									
Priority und	er 35 U.S.C. § 119								
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>									
2) Notice of 3) Information	References Cited (PTO-892) Draftsperson's Patent Drawing Review (Pon Disclosure Statement(s) (PTO/SB/08) (s)/Mail Date	PTO-948)	4) 5) 6)	· <b>二</b>	nte				

Application/Control Number: 10/764,660 Page 2

Art Unit: 2179

## **DETAILED ACTION**

## Continued Examination Under 37 CFR 1.114

- 1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/10/2008 has been entered.
- 2. Claims 1-4, 6-21, 24, and 25 are pending. Claims 1, 12, and 20 are the independent claims. Claims 1, 12, and 20 are the amended claims. Claims 5, 22, and 23 have been cancelled. Claims 1-4, 6-21, 24, and 25 have been rejected by the Examiner.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-4, 6-21, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugimoto (US 6,829,009 B2) in view of Hong (KR 2000-0030838) and further in view of Stockton et al. (2002/0146250 A1).

As per independent claim 1, Sugimoto discloses a method of controlling a menu of a digital camera with a plurality of operation modes wherein one of said operation modes is in use (column 3, lines 51 - 57), the method comprising:

- counting a number of times each menu item has been used in each of the plurality of operation modes, determining a number of uses value for each menu item by totaling the number of times each menu item has been used across the plurality of operation modes, and comparing a number of uses value for each menu item (column 8, lines 3 8);
- determining a display order of the menu items according to the operation mode in use and the result of the comparison (column 5, line 53 column 6, line 5; column 7, lines 4 20; and column 8, lines 6 8); and
- displaying the menu items according to the display order (column 8, lines 6 8).

Sugimoto does not explicitly disclose identifying a user of the camera, that the number of uses value is compared to a reference value, that the menu items are displayed according to a display order that is particular for the identified user, and that the display order of the menu items is also set according to the operation mode in use. Nevertheless, in an analogous art, Hong discloses identifying a user of the camera (Constitution, lines 1-5), comparing a number of uses value to a reference number (Constitution, lines 1-4), and menu items that are displayed according to a display order that is particular for the identified user (Constitution, lines 1-4).

It would be obvious to incorporate Hong's teaching into Sugimoto's invention to determine a display order of menu items from a comparison of the frequency of use to a

Art Unit: 2179

reference value or based on a user identification, because it is only a slight variation of Sugimoto's present invention, which intends to cover all modifications falling within the spirit of the invention (column 9, lines 50 - 53). In addition, Sugimoto already discloses a reference value ("change frequency count") that is examined in relation to frequency values (Sugimoto, column 8, lines 30 - 35). Furthermore, Sugimoto also discloses that camera's are usually used in the user's own way, which is often different from those of other users (Sugimoto, column 1, lines 26 - 29). Therefore, it would be beneficial for a user identification to be used to allow for each user to use the camera in their own way. As such, the ability to use a reference value along with the frequency values or to use a user identification would be an obvious modification to Sugimoto's present invention.

In addition, although Sugimoto also discloses that a user can set functions of an operation button and display order of menu items freely as needed (column 9, lines 14—19 and 37 – 46), which has been interpreted to mean that a user could choose to set the display order of menu items according to particular operation modes, Sugimoto, or Hong, nonetheless do not explicitly recite the claim language pertaining to disclosing that the display order of the menu items is also set according to the operation mode in use, one of ordinary skill in the art may look to the Stockton reference, which discloses that different menus are displayed according to the operation mode in use ([0021]).

Sugimoto, Hong, and Stockton all pertain to user interfaces of digital cameras, which include different menus and modes of operation. Consequently, one would look to the other for possibly improving features of their invention. In addition, because it is well known in the art that digital cameras may contain different operating modes, it would be obvious for Sugimoto to

realize that the different operating modes would have different menus, and thus contain different menu items pertaining to the particular operating mode, such as disclosed by Stockton. Thus, it would be obvious to incorporate Stockton's teaching into the combination of Sugimoto and Hong. In addition, taking into account the fact that Sugimoto intends to cover all modifications falling within the spirit of the invention (column 9, lines 50 - 53), Sugimoto would obviously want to extend his invention to be able to alter a menu order or initially active menu item according to the menu items of each selectable operating mode, so that his invention would work on all menus of the interface and not just one.

As per independent claim 12, Sugimoto discloses a method of controlling a menu having a plurality of menu items with a static display order of a digital camera with a plurality of operation modes wherein one of said operation modes is in use (column 3, lines 51 – 57), the method comprising:

- comparing the number of uses of the menu items to be displayed (column 7, lines 38 43);
- determining whether a menu item will be initially active from among the menu items to be displayed according to the operation mode in use and the result of the comparison step (column 5, line 53 column 6, line 5 and column 7, lines 4 43), where it has been interpreted that having the cursor initially set to a menu item sufficiently corresponds to said menu item being initially active; and
- displaying the menu items in the static display order and activating a menu item from among the displayed menu items (column 7, lines 4-43), wherein it has

been interpreted that the activated menu item sufficiently corresponds to the menu item of the starting position.

Sugimoto does not explicitly disclose identifying a user of the camera, that the number of uses value is compared to a reference value, that the menu items are displayed according to a display order that is particular for the identified user, and that the display order of the menu items is also set according to the operation mode in use. Nevertheless, in an analogous art, Hong discloses identifying a user of the camera (Constitution, lines 1-5), comparing a number of uses value to a reference number (Constitution, lines 1-4), and menu items that are displayed according to a display order that is particular for the identified user (Constitution, lines 1-4).

It would be obvious to incorporate Hong's teaching into Sugimoto's invention for the same reasons as disclosed in the rejection of claim 1, *supra*.

In addition, although Sugimoto also discloses that a user can set functions of an operation button and display order of menu items freely as needed (column 9, lines 14—19 and 37 – 46), which has been interpreted to mean that a user could choose to set the display order of menu items according to particular operation modes, Sugimoto, or Hong, nonetheless do not explicitly recite the claim language pertaining to disclosing that the initially active menu item is also set according to the operation mode in use, one of ordinary skill in the art may look to the Stockton reference, which discloses that different menus are displayed according to the operation mode in use ([0021]), wherein it has been interpreted that each different menu has an initially active menu item, because the camera, and thus particular operating mode, is currently in use.

Sugimoto, Hong, and Stockton all pertain to user interfaces of digital cameras, which include different menus and modes of operation. Consequently, one would look to the other for

possibly improving features of their invention. In addition, because it is well known in the art that digital cameras may contain different operating modes, it would be obvious for Sugimoto to realize that the different operating modes would have different menus, and thus contain different menu items pertaining to the particular operating mode, such as disclosed by Stockton. Thus, it would be obvious to incorporate Stockton's teaching into the combination of Sugimoto and Hong. In addition, taking into account the fact that Sugimoto intends to cover all modifications falling within the spirit of the invention (column 9, lines 50 - 53), Sugimoto would obviously want to extend his invention to be able to alter a menu order or initially active menu item according to the menu items of each selectable operating mode, so that his invention would work on all menus of the interface and not just one.

As per independent claim 20, Sugimoto discloses a digital camera capable of controlling an adaptive menu with a static display order, the camera comprising:

- an image photographing portion to photograph an object (column 3, lines 7 19);
- an image processing portion to perform predetermined image processing and output the processed digital image data (column 4, lines 31 62);
- a recording portion to store the digital image data (column 4, lines 52-62);
- a display portion to display the menu items (column 6, lines 6 19) in the static display order (column 7, lines 13 15) and activate the menu items with one menu item initially active (column 7, lines 4 7), where it has been interpreted that having the cursor initially set to a menu item sufficiently corresponds to said menu item being initially active,

(column 6, lines 20 - 25);

- an operation portion to select a menu item displayed on the display portion

Page 8

- a storage portion which is non-volatile and stores number of uses values of the menu items (Figure 4, "68: Display Memory"), wherein the fact that the CPU and display setting processing block communicate with the display memory indicates that said display memory is the storage portion that stores the values, order, and settings pertaining to the menu display;
- a plurality of operation modes wherein one of said operation modes is in use (column 3, lines 51 57); and
- a control portion to set the initially active menu item among menu items displayed in the static display order according to the operation mode in use and the number of uses of the menu items (column 5, line 53 column 6, line 5 and column 7, lines 4 20).

Sugimoto does not explicitly disclose identifying a user of the camera, that the number of uses value is compared to a reference value, that the menu items are displayed according to a display order that is particular for the identified user, and that the display order of the menu items is also set according to the operation mode in use. Nevertheless, in an analogous art, Hong discloses identifying a user of the camera (Constitution, lines 1-5), comparing a number of uses value to a reference number (Constitution, lines 1-4), and menu items that are displayed according to a display order that is particular for a separately identified user (Constitution, lines 1-4).

Art Unit: 2179

It would be obvious to incorporate Hong's teaching into Sugimoto's invention for the same reasons as disclosed in the rejection of claim 1, *supra*.

In addition, although Sugimoto also discloses that a user can set functions of an operation button and display order of menu items freely as needed (column 9, lines 14—19 and 37 – 46), which has been interpreted to mean that a user could choose to set the display order of menu items according to particular operation modes, Sugimoto, or Hong, nonetheless do not explicitly recite the claim language pertaining to disclosing that the initially active menu item is also set according to the operation mode in use, one of ordinary skill in the art may look to the Stockton reference, which discloses that different menus are displayed according to the operation mode in use ([0021]), wherein it has been interpreted that each different menu has an initially active menu item, because the camera, and thus particular operating mode, is currently in use.

Sugimoto, Hong, and Stockton all pertain to user interfaces of digital cameras, which include different menus and modes of operation. Consequently, one would look to the other for possibly improving features of their invention. In addition, because it is well known in the art that digital cameras may contain different operating modes, it would be obvious for Sugimoto to realize that the different operating modes would have different menus, and thus contain different menu items pertaining to the particular operating mode, such as disclosed by Stockton. Thus, it would be obvious to incorporate Stockton's teaching into the combination of Sugimoto and Hong. In addition, taking into account the fact that Sugimoto intends to cover all modifications falling within the spirit of the invention (column 9, lines 50 – 53), Sugimoto would obviously want to extend his invention to be able to alter a menu order or initially active menu item

according to the menu items of each selectable operating mode, so that his invention would work on all menus of the interface and not just one.

As per claim 2, and taking into account the rejection of claim 1, Sugimoto further discloses determining whether a menu item is selected by the user among the displayed menu items, increasing the number of uses value for the selected menu item, and storing the number of uses value (column 8, lines 3-6).

As per claim 3, and taking into account the rejection of claim 1, Sugimoto further discloses that during the display order determination step, the set display order is not changed when a menu item having the number of uses which is greater than the reference number does not exist (Constitution, lines 1-4).

As per claim 4, and taking into account the rejection of claim 1, Hong further discloses changing a menu display when a menu item has a number of uses value greater than the reference number (Constitution, lines 1-4).

In addition, Sugimoto discloses that in changing the menu display, the display order of the menu items is changed according to the order of the number of uses (column 8, lines 6-8).

It would have further been obvious to combine this feature of Hong with Sugimoto and Stockton for the same reasons as disclosed in the rejection of claim 1, *supra*.

As per claim 6, and taking into account the rejection of claim 1, Hong further discloses that the reference number can be set by the user (Constitution, lines 1-4), wherein it would have further been obvious to combine this feature of Hong with Sugimoto and Stockton for the same reasons as disclosed in the rejection of claim 1, supra.

As per claim 7, and taking into account the rejection of claim 1, Hong further discloses

that the reference number is preset to a default value (Constitution, lines 1-4), wherein the initial setting of numbers to default values is well known in the art and it is obvious that the reference number would be preset to a default value before being changed by a user, further wherein it would have further been obvious to combine this feature of Hong with Sugimoto and Stockton for the same reasons as disclosed in the rejection of claim 1, supra.

As per claim 8, and taking into account the rejection of claim 1, it would further be obvious that the reference number and menu order may be different for different operation modes. It would be obvious, because Sugimoto and Hong would want their inventions to be applicable across all operating modes and not just one, as disclosed by the rejection of claim 1, supra.

As per claim 9, and taking into account the rejection of claim 1, Sugimoto further discloses that the first displayed menu item is initially active during the display operation (column 7, lines 50 - 51), where it has been interpreted that having the cursor initially set to a menu item sufficiently corresponds to said menu item being initially active.

**As per claim 10,** and taking into account the rejection of claim 1, Sugimoto further discloses that *the stored number of uses values may be altered by the user* (column 8, lines 3 – 6).

As per claim 11, and taking into account the rejection of claim 2, Sugimoto further discloses that the menu order is immediately updated after a menu item is selected (column 8, lines 19-24).

As per claim 13, and taking into account the rejection of claim 12, Sugimoto further discloses determining whether a menu item is selected by the user among the displayed menu

items, increasing the number of uses value of a selected menu item when the menu item is selected, and storing the number of uses value (column 7, lines 38 – 43).

As per claim 14, and taking into account the rejection of claim 12, Hong further discloses that the step of determining whether a menu item will be initially active further comprises: when there is no number of uses value of a menu item greater than the reference number, not changing which menu item is initially active (Constitution, lines 1-4), wherein it would have further been obvious to combine this feature of Hong with Sugimoto and Stockton for the same reasons as disclosed in the rejection of claim 1, *supra*.

As per claim 15, and taking into account the rejection of claim 12, Hong further discloses changing a menu display when a menu item has a number of uses value greater than the reference number (Constitution, lines 1-4).

In addition, Sugimoto discloses that the changing of the menu display includes setting the menu item having the largest number of uses value as the initially active menu item (column 7, lines 34 - 43).

It would have further been obvious to combine this feature of Hong with Sugimoto and Stockton for the same reasons as disclosed in the rejection of claim 1, *supra*.

As per claim 16, and taking into account the rejection of claim 12, Hong further discloses that the reference number can be set by the user (Constitution, lines 1-4), wherein it would have further been obvious to combine this feature of Hong with Sugimoto and Stockton for the same reasons as disclosed in the rejection of claim 1, *supra*.

As per claim 17, and taking into account the rejection of claim 12, Hong further discloses that the reference number is preset to a default value (Constitution, lines 1-4), wherein the initial setting of numbers to default values is well known in the art and it is obvious that the reference number would be preset to a default value before being changed by a user, further wherein it would have further been obvious to combine this feature of Hong with Sugimoto and Stockton for the same reasons as disclosed in the rejection of claim 1, *supra*.

Page 13

**As per claim 18,** and taking into account the rejection of claim 12, Sugimoto further discloses that *the reference number is different for different operating modes* (column 2, lines 1 – 8).

**As per claim 19,** and taking into account the rejection of claim 12, Sugimoto further discloses that *the stored number of uses values may be altered by the user* (column 7, lines 38 – 43).

As per claim 21, and taking into account the rejection of claim 22, Sugimoto further discloses that the operation portion comprises directional movement buttons to allow selection of the menu items displayed on the display portion to the upper, lower, left, and right sides of the initially active menu item and a selection button to select the menu item (column 6, lines 6-25).

As per claim 24, and taking into account the rejection of claim 22, Sugimoto further discloses that the control portion determines the initially active menu item to be the menu item with the largest number of uses value (column 7, lines 34-43).

As per claim 25, and taking into account the rejection of claim 20, Sugimoto further discloses that the control portion changes the menu display by setting the initially active menu item according to the size of the number of uses value (column 7, lines 34 - 43).

Sugimoto does not explicitly disclose changing a menu display only when a menu item's number of uses value is greater than a reference number. Nevertheless, in an analogous art, Hong

discloses changing a menu display only when a menu item's number of uses value is greater than a reference number (Constitution, lines 1-4).

Thus, it would be obvious to incorporate Hong's teaching into the invention of Sugimoto and Stockton for the same reasons as disclosed in the rejection of claim 1, *supra*.

## Response to Arguments

- 5. Applicant's arguments filed on 12/10/2008 have been fully considered, but they are not persuasive.
- 6. The Applicant has argued that the combination of Sugimoto, Hong, and Stockton does not teach or suggest a management of a menu frequency that is based both on a user identification and for a given user, the particular operating mode in use.

In response to this argument, the Examiner respectfully disagrees. Please refer to Sugimoto, column 5, line 53 – column 6, line 5; column 7, lines 4 – 20; and column 8, lines 3 - 8, as well as to Hong, Constitution, lines 1 – 5 and Stockton [0021], wherein in light of all of the analogous references and teachings disclosed therein, it has been determined that it would have been obvious to one of ordinary skill in the art at the time of invention to look to such features as the use of user identification to set particular menu display order as disclosed by Hong and to combine these features of Hong with such analogous teachings as that of general menu management display order as disclosed by Sugimoto. The combination would have been obvious, because both Sugimoto and Hong pertain to menu display order in electronic cameras, wherein both also pertain to the user of a value relating to a number of uses that assists in the

process of determining menu display order for a user. In addition, it would be obvious that

another means to assist in determining menu display order for a user would be by determining

menu display order for a particular user, such as by identifying such a particular user through the

teachings taught in the analogous art of Hong. Therefore, it would have been obvious to one of

ordinary skill in the art at the time of invention to combine the teachings of Sugimoto, Hong, and

Stockton.

Conclusion

7. It is noted that any citation to specific, pages, columns, lines, or figures in the prior art

references and any interpretation of the references should not be considered to be limiting in any

way. A reference is relevant for all it contains and may be relied upon for all that it would have

reasonably suggested to one having ordinary skill in the art. In re Heck, 699 F.2d 1331, 1332-

33,216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006,1009, 158

USPQ 275, 277 (CCPA 1968)).

8. The prior art made of record and not relied upon is considered pertinent to the

applicant's disclosure. The cited documents represent the general state of the art.

9. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Eric A. Wiener whose telephone number is 571-270-1401. The

examiner can normally be reached on Monday through Thursday from 9am to 5pm.

Application/Control Number: 10/764,660

Art Unit: 2179

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

Page 16

supervisor, Weilun Lo, can be reached on 571-272-4847. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Eric Wiener/

Examiner, Art Unit 2179

/Ba Huynh/

Primary Examiner, Art Unit 2179